

In the claims:

For the Examiner's convenience, all pending claims are presented below with changes shown in accordance with the mandatory amendment format.

1. (Currently Amended) A method comprising:

intercepting an operating system thread creation request for a function comprising: [[;]]
intercepting an operating system thread creation request for a first function including:
intercepting a call to an operating system thread creation function having a
reference to a first function and a function parameter, and
creating a thread for a second function including:
determining a stack pointer offset,
creating a data structure having said reference to said first function,
said function parameter, and said stack pointer offset, and
generating a call to said operating system thread creation function
having a reference to a second function and a reference to a
data structure,
creating a thread in response to intercepting said operating system thread creation
request comprises creating a thread for said second function, and
executing said function utilizing said thread in response to modifying said initial stack
pointer of said stack comprises executing said first function;
creating a thread in response to intercepting said operating system thread creation request,
said thread including a stack;
modifying an initial stack pointer of said stack; and

executing said function utilizing said thread in response to modifying said initial stack pointer of said stack.

2. (Currently Amended) The method of claim 1, wherein intercepting said an-operating system thread creation request for said a-function further comprises:

linking a dynamic-link library to a process, said process including a reference table; and initializing said dynamic-link library.

3. (Currently Amended) The method of claim 2, wherein said reference table includes a reference corresponding to said an-operating system thread creation function and initializing said dynamic-link library comprises replacing said reference corresponding to said operating system thread creation function with a reference corresponding to a substitute thread creation function.

4. (Cancelled)

5. (Cancelled)

6. (Currently Amended) The method of claim 1 5, said method further comprising executing said second function utilizing said thread.

7. (Currently Amended) The method of claim 6, wherein modifying said ~~an~~ initial stack pointer of said stack comprises ~~modifying said initial stack pointer of said stack utilizing said stack pointer offset in response to executing said second function utilizing said thread.~~

8. (Original) The method of claim 7, wherein modifying said initial stack pointer of said stack utilizing said stack pointer offset in response to executing said second function utilizing said thread comprises incrementing said initial stack pointer by said stack pointer offset.

9. (Original) The method of claim 6, wherein executing said first function comprises executing said first function utilizing said reference to said first function and said function parameter.

10. (Currently Amended) A machine-accessible medium having machine-executable instructions embodied therein which, when executed by a machine, causes said machine to perform a method comprising:

intercepting an operating system thread creation request for a function comprising: [[;]]
intercepting an operating system thread creation request for a first function including:
intercepting a call to an operating system thread creation function having a
reference to a first function and a function parameter, and
creating a thread for a second function including:
determining a stack pointer offset,

creating a data structure having said reference to said first function,
said function parameter, and said stack pointer offset, and
generating a call to said operating system thread creation function
having a reference to a second function and a reference to a
data structure,

creating a thread in response to intercepting said operating system thread creation
request comprises creating a thread for said second function, and
executing said function utilizing said thread in response to modifying said initial stack
pointer of said stack comprises executing said first function;

creating a thread in response to intercepting said operating system thread creation request,
said thread including a stack;
modifying an initial stack pointer of said stack; and
executing said function utilizing said thread in response to modifying said initial stack
pointer of said stack.

11. (Currently Amended) The machine-accessible medium of claim 10, wherein
intercepting said an-operating system thread creation request for said a-function further
comprises:

linking a dynamic-link library to a process, said process including a reference table; and
initializing said dynamic-link library.

12. (Currently Amended) The machine-accessible medium of claim 11, wherein said
reference table includes a reference corresponding to said an-operating system thread creation

function and initializing said dynamic-link library comprises replacing said reference corresponding to said operating system thread creation function with a reference corresponding to a substitute thread creation function.

13. (Cancelled)

14. (Cancelled)

15. (Currently Amended) The machine-accessible medium of claim 10-14, said method further comprising executing said second function utilizing said thread.

16. (Currently Amended) The machine-accessible medium of claim 15, wherein modifying said an-initial stack pointer of said stack comprises ~~modifying said initial stack pointer of said stack~~ utilizing said stack pointer offset in response to executing said second function utilizing said thread.

17. (Original) The machine-accessible medium of claim 16, wherein modifying said initial stack pointer of said stack utilizing said stack pointer offset in response to executing said second function utilizing said thread comprises incrementing said initial stack pointer by said stack pointer offset.

18. (Original) The machine-accessible medium of claim 15, wherein executing said first function comprises executing said first function utilizing said reference to said first function and said function parameter.

19. (Currently Amended) A data processing system comprising:

a processor;

a first memory coupled to said processor, said first memory comprising a virtually-addressable cache memory; and

a second memory coupled to said first memory, said second memory comprising:

a first program module to intercept an operating system thread creation request for a function and to create a thread in response to an interception of said operating system thread creation request comprising: [[,]]

a first program module to intercept an operating system thread creation request for a first function and to create a thread for a second function including:

a first program module to intercept a call to said operating system thread creation function having a reference to said first function and a function parameter; to determine a stack pointer offset; to create a data structure having said reference to said first function, said function parameter, and said stack pointer offset; and to generate a call to said operating system thread creation function having a reference to said second function and a reference to said data structure;

said thread including a stack; and
 a second program module to modify an initial stack pointer of said stack and to
 execute said function utilizing said thread in response to a modification of said
 initial stack pointer of said stack including:
 a second program module to execute said first function.

20. (Original) The data processing system of claim 19, wherein said initial stack pointer of said stack comprises a virtual address corresponding to a location within said virtually-addressable cache memory.
21. (Original) The data processing system of claim 19, wherein said first program module and said second program module comprise a dynamic-link library linked with a process, said process including a reference table.
22. (Original) The data processing system of claim 21, wherein said reference table includes a reference corresponding to an operating system thread creation function and said first program module to intercept an operating system thread creation request for a function comprises a first program module to replace said reference corresponding to said operating system thread creation function with a reference corresponding to a substitute thread creation function.
23. (Cancelled)

24. (Original) The data processing system of claim 23, wherein said second program module comprises said second function.

25. (Cancelled)

26. (Currently Amended) An apparatus comprising:

a processor;

a first memory coupled to said processor, said first memory comprising a virtually-addressable cache memory; and

a second memory coupled to said first memory, said second memory comprising:

a first program module to intercept an operating system thread creation request for a function and to create a thread in response to an interception of said operating system thread creation request comprising: [[,]]

a first program module to intercept an operating system thread creation request for a first function and to create a thread for a second function including:

a first program module to intercept a call to said operating system thread creation function having a reference to said first function and a function parameter; to determine a stack pointer offset; to create a data structure having said reference to said first function, said function parameter, and said stack pointer offset; and to generate a call to said operating system thread

creation function having a reference to said second function
and a reference to said data structure;
said thread including a stack; and
a second program module to modify an initial stack pointer of said stack and to
execute said function utilizing said thread in response to a modification of said
initial stack pointer of said stack comprising:
a second program module to execute said first function.

27. (Original) The apparatus of claim 26, wherein said first program module and said second program module comprise a dynamic-link library linked with a process, said process including a reference table.

28. (Cancelled)